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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-----------------------|----------------------|---------------------|------------------|
| 09/517,974 | 03/03/2000 | Steven V. Larson | 13661-107 | 5719 |
| 32300 | 7590 10/26/2005 | | EXAMINER | |
| BRIGGS AND MORGAN P.A. | | | STRIMBU, GREGORY J | |
| 2200 IDS CEN | ITER | | | |
| 80 SOUTH 8TH ST | | | ART UNIT | PAPER NUMBER |
| MINNEAPOL | MINNEAPOLIS, MN 55402 | | | |

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | ¥ | | | | |
|--|---|---|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| | 09/517,974 | LARSON, STEVEN V. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Gregory J. Strimbu | 3634 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 29 Au | <u>ıgust 2005</u> . | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | This action is FINAL . 2b) ☐ This action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-17 and 19-21</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-17 and 19-21</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | • | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | г. | 1 | | | | |
| 10)⊠ The drawing(s) filed on <u>29 August 2001</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| A44-a-b | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ate | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) Notice of Informal F 6) Other: | Patent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date | o) 🗀 Ouldi | · | | | | |

Drawings

The corrected or substitute drawings received on August 29, 2001 have been approved.

Claim Rejections - 35 USC § 112

Claims 1-17 and 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "a hinged door engaging the frame" on line 4 of claim 1 render the claims indefinite because it is unclear how the door is engaging the frame when the door is in an open position. It is suggested that the applicant change recitations such as "a hinged door engaging the frame" to --a hinged door engageable with the frame-- to avoid confusion.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Gamow.

Gamow discloses a door 170 and frame 180 in combination with an air handling unit

110 and 120 for a building having a roof, wherein the door and frame can withstand a

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pressure differential of greater than six inches of air pressure, the air handling unit being capable of being mounted on a roof of a building.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow. The admitted prior art in figure 1 discloses an air handling unit mountable on the roof of a building comprising, a hinged door (D) engaging the air handling unit and comprising a front wall (not numbered, but shown in figure 1) and side walls (not shown) and a rear wall (not shown) with an insulating material (see page 2, lines 16-17), a gasket (not shown), the hinged door and air handling unit are capable of withstanding a pressure differential of up to six inches of air pressure (see page 2, lines 18-19). The admitted prior art is silent concerning a frame, a gasket with anti-roll extensions and a hollow core.

However, McDonald discloses a door and frame combination, comprising a frame 10, a hinged door 56 engaging the frame, the door 56 further comprising a front wall (not numbered), rear wall (not numbered), and side walls (not numbered) enclosing a hollow core (not numbered) and insulting material 66 filling the hollow core. The

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insulating material is an expanding polyurethane foam. As shown in figure 1, the door includes a window (not numbered) (claim 8).

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a frame, and a hollow core and insulating material, as taught by McDonald, to increase the insulating value and strength of the door when in the closed position.

Additionally, Ryan et al. discloses a gasket 10 for sealing between a door and a door frame wherein the gasket includes anti-roll extensions 15-17, 20 and 21 and has a central hollow core.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a anti-roll extensions, as taught by Ryan et al., to improve the seal between the door and the door frame.

Finally, Gamow discloses a seal (not numbered, but see column 4, lines 6-9) capable of withstanding a pressure differential of greater than 6.5 inches of pressure.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in figure 1 with a seal capable of withstanding a pressure differential greater than 6.5 inches, as taught by Gamow, to prevent air from moving between the door and door frame during high pressure differential situations.

With respect to claim 3, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an

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obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claims 9-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow. The admitted prior art in figure 1 discloses an air handling unit mountable on the roof of a building comprising, a hinged door (D) engaging the air handling unit and comprising a front wall (not numbered, but shown in figure 1) and side walls (not shown) and a rear wall (not shown) with an insulating material (see page 2, lines 16-17), a gasket (not shown), the hinged door and air handling unit are capable of withstanding a pressure differential of up to six inches of air pressure (see page 2, lines 18-19). The admitted prior art is silent concerning actually mounting the air handling unit to an edifice, a frame, a gasket with anti-roll extensions and a hollow core.

It would have been obvious to one of ordinary skill in the art to fixedly mount the air handling unit on a non-movable edifice, as taught by the admitted prior art in figure 1, to conserve land.

McDonald discloses a door and frame combination, comprising a frame 10, a hinged door 56 engaging the frame, the door 56 further comprising a front wall (not numbered), rear wall (not numbered), and side walls (not numbered) enclosing a hollow core (not numbered) and insulting material 66 filling the hollow core. The insulating

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material is an expanding polyurethane foam. As shown in figure 1, the door includes a window (not numbered) (claim 8).

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a frame, and a hollow core and insulating material, as taught by McDonald, to increase the insulating value and strength of the door when in the closed position.

Additionally, Ryan et al. discloses a gasket 10 for sealing between a door and a door frame wherein the gasket includes anti-roll extensions 15-17, 20 and 21 and has a central hollow core.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a anti-roll extensions, as taught by Ryan et al., to improve the seal between the door and the door frame.

Finally, Gamow discloses a seal (not numbered, but see column 4, lines 6-9) capable of withstanding a pressure differential of greater than 11 inches of pressure.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in figure 1 with a seal capable of withstanding a pressure differential greater than 11 inches, as taught by Gamow, to prevent air from moving between the door and door frame during high pressure differential situations.

With respect to claim 10, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an

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obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claims 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al., and Gamow, as applied to claims 9-11 and 15 above, and further in view of Colliander, and Jansen.

Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Moreover, Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

With respect to claim 20, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is

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expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4 and 8 above, and further in view of Colliander. Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4 and 8 above, and further in view of Jansen.

Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant

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insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of McDonald, Ryan et al. and Gamow as applied to claims 9-11 and 15 above, and further in view of Colliander. Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow as applied to claims 9-11 and 15 above, and further in view of Jansen.

Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

Response to Arguments

Applicant's arguments filed August 29, 2005 have been fully considered but they are not persuasive.

The applicant's comments concerning claim 21 are moot in view of the new grounds of rejection.

With respect to the applicant's comments concerning Gamow, the examiner respectfully disagrees. Gamow is analogous art because both the applicant and Gamow were concerned with the particular problem of preventing air from an ambient high pressure area moving between a hinged door and a frame to interior having a lower pressure than the ambient pressure. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992) where the court held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention.

It should be noted that 11 inches of mercury is approximately equal to 5.4 psi which is well under the 10 psi disclosed by Gamow.

Conclusion '

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The applicant amended claim 21 to include the new limitation of "the

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air handling unit being adapted for mounting on the roof of the building" on lines 3-4 of claim 21 which necessitated the new grounds of rejection.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory ปี. Strimbน์ Primary Examiner

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October 24, 2005